Sturgeon PWT Meeting Notes

July 8, 2009
3500 Industrial Blvd., Room 119
West Sacramento, CA 95691
10:00 a.m. – 3:00 p.m.

Columbia River Green Sturgeon Research - Mike Parsley (USGS, Washington)

Mike described his green sturgeon research focusing on Coos Bay and the mouth of the Columbia. The purpose of the research is to determine how green sturgeon use navigation channels and dredged areas. Mike also expressed an interest in collaborating with folks working on the Sacramento River and would provide 25-30 (10 yr) VEMCO transmitters (with depth and temperature sensors) for fall and winter activities. Mike is working on getting permits for capture and tagging of fish in Oregon and Washington waters. Josh Israel asked about tissue samples from the north coast to determine mixing of DPS and recommended that Mike add language to permit application. Pete mentioned the inaccuracy of the depth sensors, and the need to fix that. Mike said he's been working with Vemco on that very issue. Jeffrey Jahn noted that the take prohibitions have not been established yet for GS, so Sec 10 permits or 4d rules could not be issued. Have to go to Sec. 7 consultation if you are a federal agency. Sharing tags would have to be covered in SW region of NMFS rather than the NW region permit Mike Parsley is pursuing. Pete Klimley may be interested in assisting as he has take for 10 green sturgeon, has caught as few as 10, as many as 25 (checking with DFG if they can tag more).

Sturgeon Abundance Estimate Procedures: Marty Gingras (CDFG)/Zac Jackson (USFWS)

Marty's group establishes WS abundance of 'legal size' fish. The GS estimate is extrapolated based on number of GS caught while conducting WS counts. WS abundance estimates are expensive and time consuming with each annual estimate taking 3-9 years. Problems include it being difficult to tag enough white sturgeon to get sufficient recaptures. Since GS are more 'rare', using m/r would be almost impossible. WS estimates have very wide confidence intervals, GS would be even wider. Estimates are not stratified by age or sex, so assumptions are made of age and survival. Summary is that WS estimates are 'not very good' and GS would be even more problematic.

There is interest in improving green sturgeon abundance estimates. Sonar based approaches by Ethan Mora might be useful for green sturgeon. Steve Lindley discussed Ethan's research project that will use sonar strip counts for densities, video to estimate species ratios, and random stratified sampling to assess habitat. In the Columbia River, abundance estimates for legal-sized white sturgeon are conducted in impounded regions every 3 yrs, working on abundance of legal sized white sturgeon in Lower Columbia, but currently there is no work conducted on juvenile or oversized sturgeon. Can estimate white sturgeon abundance and annual harvest rates from sturgeon report cards. Maybe do something roughly similar with green sturgeon, but

needs further discussion. Maybe add more data fields to sturgeon report card, such as length and weight. Marty suggested that it might be useful to tag thousands of juvenile green sturgeon and release into the Bay to estimate mortality rates. This would require a Sec 10 permit, Sec. 7 consultation, and development of an HGMP. It may be important to monitor multiple life history stages. What is the possibility of doing juvenile abundance estimates upriver? Only gets a subset of juveniles, but might be able to use other surveys and lab studies to extrapolate an estimate. Is there a large-scale database of sturgeon abundance in different systems that might be helpful in understanding sturgeon abundance in CA? Would be useful to develop an interstate database. Would be useful to standardize PIT-tagging procedures across agencies and develop research protocols through NOAA. Pete mentioned that the use of long-term tags can provide age-specific mortality rates. Fraser River – British Columbia they have a lot of fish with pit tags they are using for m/r. Mike Parsley asked if we really need a population estimate or if we could get what we need using trends? Steve suggested that we need at least one GS abundance estimate. Someone suggested using length-cohort analysis. The problem is there is size specific habitat use – and data is scattered. Should we be trying to assess recruits instead of the adult/spawner population? Josh is suggesting that we should be looking at a different life history stages and evaluate year-class strength. Lindley suggests standardizing pit tagging procedures for GS.

USACE plans on holding a GS symposium which will primarily focus on dredging in 2-3 months. Standardization of research protocols (including use of PIT tags) needs to be brought up at a future meeting. NMFS has a national Sturgeon call and their 'region' is developing protocols, which could be brought to the group.

Fishing Regulations: Scott Barrow (CDFG)

Fishing regulations are developed and presented to the public via two mechanisms – statutes put forth by Fish and Game Commission (Title 14 regulations) and regulations developed to specify requirements given by legislature. CDFG reviews regulations for the commission. The public are involved in development of regulations through three meetings (notice, discussion, and adoption hearing) where the public can interact with commissioners. There will be scoping meetings soon about sturgeon regulations before the notice of proposed rulemaking, initial statement of reasons, or text of regulations. In 2006, CDFG enacted emergency regulations for sturgeon to ask for closure. The response was that CDFG was told to hold hearings in five affected areas, plus other more formal meetings. The result was changing the slot limit, enacting an annual bag limit for WS, a zero bag limit for green sturgeon, and a sturgeon report card. All sport fish regulations are open for public comment every 3 years. Scoping hearings will be held about closure of upper Sacramento River for green sturgeon (either year round closure – HWY 162 up to Keswick or closure from March 1 to July 31 with gear restrictions in same area). Might be useful for members of the PWT to attend. Proposed regulation changes can be found at www.fgc.ca.gov and the CDFG website.

GS Recovery Planning: David Woodbury (NMFS)

David Woodbury and (Jeff Stewart) leads on writing the plan. Develop a team of approximately (12) persons from various agencies/entities. Kickoff meeting will include team and stakeholders. David will be taking recovery team training in September and have updates at the next PWT meeting.

4(d) Rule Research Permit Issues: Jeffrey Jahn (NMFS)

- Critical Habitat Designation likely finalized in October 2009.
- Mid-year 2010, 4(d) rule expected to be published.

Types of take under ESA:

1. Incidental – agencies funding or permitting activities may affect listed species. Those agencies required to do section 7 consultation (which generally leads to a BO)
2. Direct – listed species targeted; usually related to research, monitoring, enhancement/hatchery activities; need 4(d) approval or 10(a)(1)(A) permits

BASIC SUMMARY:
Proposed 4(d) rule – evaluate activities that might impede efforts to conserve and recover the Southern DPS. Decided to apply ESA Section 9 take prohibitions (with some proposed exceptions and exemptions).

1. Permit not needed (from NMFS) for exceptions
    a. Exceptions excluded from take prohibitions can change at any time
    b. Activities that meet very specific criteria: Research and monitoring, Enforcement, Emergency fish rescues, and Habitat restoration
2. Exemptions obtained through 4(d) research programs include the following activities: Commercial and recreational fisheries, Tribal fisheries, and Scientific research and monitoring
3. Other take obtained through Sections 7 and 10

MORE IN-DEPTH
Exception criteria (if you follow this don't need 4(d) approval): comply with all permits; research must be on southern DPS; can only take live adults during non-spawning periods in various waterways (pretty much anywhere); take must be non-lethal; can't remove any life stage from water more than 60 minutes; take must not involve artificial spawning or enhancement; need complete study description, including proof of coverage for other listed spp (at least 60 days prior); report including total # of SDPS taken (and other spp), info supporting non-lethal take, summary of project results; if involves federal nexus, must comply with Section 7(a)(2).

Exemptions: commercial and recreational fishing; tribal fishery management; scientific research and monitoring; state-sponsored, ESA compliant research program between state fishery agencies and NMFS; must meet state and federal laws, need SCP; can incorporate into existing state 4(d) research programs established for listed salmonids; need to submit applications through APPS website, NMFS reviews applications; if project approved for inclusion in annual program, then exempt from Section 9

prohibitions, as long as consistent with approved activities and give annual report; 4(d) program is annual program, have to apply and supply reports annually. Benefit is that as project goes on, 4(d) allows you to make changes in methods and/or take over time b/c annual; exception must submit info 60 days prior to implementing research or for ongoing, must submit info within 60 days after publication of final rule; exemption must submit application within 120 days after publication of final rule; apps.nmfs.noaa.gov (pre-application guide helps you know which permit is appropriate; allows you to apply online).

Federal nexus projects requiring incidental take not covered by exception or exemption will be examined on case-by-case basis. "You don't want to go that route," says David Woodbury; direct take not under exception or exemption may go through ESA 10(a)(1)(a) – you are locked in to take and activities described in permit. Have to re-apply if you just want to change methods in your permit;

Conceptual Model, Research Priorities, Rankings (Josh/Alicia/Zac)

Delta Regional Ecosystem Restoration Implementation Plan (DRERIP) models – 15 physical models, 10 species models (GS/WS etc). Used in Bay Delta Conservation Plan and OCAP BO. Describes abiotic and biotic drivers of transition probabilities between life history stages. DRERIP is habitat based so we are missing important components. Josh suggested we discuss the WS model at the next meeting to identify research priorities. The sturgeon conceptual models are being used to help us determine what we don't know. This will help us justify funding requests from IEP or other sources for future studies by offering insight into what is likely to provide the most benefit.

Distribution list is now put together. Sturgeon PWT website will be available early next week. Repository for scientific articles on the website is available.

Other:
Zac informed the group of an acoustic telemetry study proposed by AFRP that would partner with CDFG (Tim Heyne, Steve Tsao) to purchase and install 12 VEMCO receivers in the San Joaquin River and tributaries and implant 20 transmitters in sturgeon.

Attendees:

Full Name	Affiliation
Adkison, Mark	DFG
Barrow, Scott	DFG
Bellmer, Russ	DFG
Chase, Robert	USBR
Clugston, David*	USACE (Oregon)
Corwin, Richard	USBR
Drauch-Schreier, Andrea	UCD
Fowler, Cynthia Jo	USACE
Gingras, Marty*	DFG
Grant, David	DWR
Hampton, Doug	NMFS
Hearn, Alex	UCD
Heyne, Tim	DFG
Israel, Josh	UCD
Jackson, Zac	USFWS
Jahn, Jeffrey	NMFS
Klimley, Pete	UCD
LaCivita, Peter	USACE
LeDoux-Bloom, Cynthia	DWR
Lester, Aric	DWR
Lindley, Steve	NMFS
Liu, Qinqin	DWR
Melcer, Danika	DWR
Miranda, Javier	DWR
Parsley, Mike*	USGS (Washington)
Poytress, Bill	USFWS
Reck, Don	USBR
Schreier, Brian	DWR
Seesholtz, Alicia	DWR
Stuart, Jeff	NMFS
Thomas, Mike	UCD
Tsao, Steve	DFG
Van Eenennaam, Joel	UCD
Witalis, Shirley	NMFS
Woodbury, David	NMFS
Workman, Michelle	USFWS

* Phoned in